

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 20554**

In the Matter of	)	
	)	
International Comparison and Consumer	)	GN Docket No. 09-47
Survey Requirements in the Broadband	)	
Data Improvement Act	)	
	)	
A National Broadband Plan for Our Future	)	GN Docket No. 09-51
	)	
Inquiry Concerning the Deployment of	)	GN Docket No. 09-137
Advanced Telecommunications Capability	)	
To All Americans in a Reasonable and	)	
Timely Fashion, and Possible Steps to	)	
Accelerate Such Deployment Pursuant to	)	
Section 706 of the Telecommunications	)	
Act of 1996, as Amended by the Broadband	)	
Data Improvement Act	)	

To: Secretary, Federal Communications Commission  
Attention: The Commission

**COMMENTS OF THE IOWA PUBLIC BROADCASTING BOARD IN  
RESPONSE TO NBP PUBLIC NOTICE # 26**

The Iowa Public Broadcasting Board provides these comments in response to the Commission's Public Notice<sup>1</sup> seeking comment in the referenced dockets on spectrum for broadband.

We are the licensee of nine noncommercial educational television stations comprising the Iowa Public Television network: KDIN-DT, Des Moines, KBIN-DT, Council Bluffs, KHIN-DT, Red Oak, KIIN-DT, Iowa City, KQIN-DT, Davenport,

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<sup>1</sup> *Data Sought on Uses of Spectrum - NBP Public Notice #26*, GN Docket Nos. 09-47, 09-51, 09-137, Public Notice, DA 09-2518 (rel. December 2, 2009) (the "Public Notice").

KRIN-DT, Waterloo, KSIN-DT, Sioux City, KTIN-DT, Fort Dodge, and KYIN, Mason City, all in Iowa.

The Iowa Public Broadcasting Board is an agency of the State of Iowa, charged with the mission to plan, establish and operate educational television stations to enrich the lives of the people of Iowa and enhance their educational opportunities throughout the state. Since its creation, Iowa Public Television has fulfilled this mission by constructing and operating a world class television broadcast network. In addition to airing PBS programming and programming from other sources, Iowa Public Television creates local content for distribution throughout Iowa and nationally. Iowa Public Television has fully embraced its role as Iowa's primary source of information about Iowa. Its commitment to serving the people of Iowa is demonstrated in the quantity and quality of the local, Iowa-specific, content it creates.

In the Public Notice, with a mind toward finding additional spectrum to allocate for wireless broadband purposes, the Commission seeks specific data on the use of spectrum currently licensed to broadcast television stations. Among other things, the FCC is attempting to account for the value that the country puts on free, over-the-air television. As reflected in the information we provide below, we urge that our use of our licensed television broadcast channels is exceptionally efficient and productive, and brings great value to our communities and that the cost to us, the State of Iowa and to our communities in the loss or curtailment of our over-the-air transmission service would be unacceptably enormous.

## Comments

### Iowa Public Television's Services are Extraordinarily Valuable to the Public.

Iowa Public Television's statewide public broadcasting network carries multiple over-the-air programming services that educate, enlighten, and entertain Iowans throughout the state. The primary programming stream – transmitted in high definition – provides unparalleled service to Iowans, through coverage of local events, local public affairs, arts and entertainment, lifestyle programming, and more. This channel also provides quality children's programming 11 hours every weekday, and for several hours on weekends, too. These programs provide families with safe entertainment that incorporates learning with fun, including a block of programming known as “Ready To Learn” (developed with funding from the U.S. Department of Education). Through extensive educational outreach efforts IPTV has developed partnerships with child care providers and with families of young children (focused on economically disadvantaged children) that rely on this broadcast programming to provide assistance in engaging their children in early literacy activities so that they will be able to enter school ready to learn.

A second programming stream, “IPTV Learns,” features informational, instructional and how-to programs during most of the day and PBS Kids programs from 5:30 p.m. until 10 p.m. Monday - Friday, and 6 a.m. until 6 p.m. Saturday and Sunday. This programming during weekdays and weekend nights provides lifelong learning opportunities allowing viewers to expand their horizons well beyond their years of formal education. This programming stream fills a void of quality, varied, and noncommercial programming on television. The availability of safe, quality PBS KIDS programs in the evenings and on weekend days expands Iowa Public Television's

presence as an important and safe place for children to encompass 17 hours a day each weekday, and 12 hours a day on weekends.

A third programming stream, called “IPTV World,” broadcasts quality local, national and international public affairs programs 24 hours a day, including Iowa Public Television’s own *Intelligent Talk Television* series (coverage of college, university and library lectures) and live coverage of Iowa current events. This channel provides civilized discourse in a media news environment otherwise increasingly lacking in solid news and journalistic standards. “IPTV World” allows Iowans to select from a very diverse array of programs and opinions.

On all its channels, Iowa Public Television broadcasts essential educational programming to help underserved and economically disadvantaged audiences make improvements in their lives.

71% of Iowa educators have indicated that they use IPTV educational programming in their classroom. These educational programs have been selected for broadcast because they match the Iowa Core Curriculum Standards and have value in helping all schools, but especially those classified as being “in need of improvement” by the Iowa Department of Education. Continuation of our broadcast service is essential to reach economically disadvantaged rural schools and their students. These programs are made available on both IPTV’s primary channel and a secondary digital channel to provide opportunities for teachers to record the programs in order to facilitate educational use of the programming.

IPTV also broadcasts programming in support of adult literacy, acquisition of workplace skills, and learning of the English language. Continuation of over-the-air broadcast availability of these educational resources is essential for reaching the audience

that can potentially gain the most benefits from these programs. Helene Grossman, State Director for Adult Literacy at the Iowa Department of Education, has stated that Iowa Public Television's educational broadcasts "provide consistent information across the state to GED candidates and ... help staff to engage new students in the GED process. IPTV has a history of commitment to adult literacy as demonstrated by participation in the Adult Literacy Summer Institute, family literacy book clubs, and the GED on Demand efforts. Each opportunity to work together has resulted in a new tool, resource, or process to benefit adult literacy staff and students across the state."

In cooperation with the Iowa Reading Information Service (IRIS), Iowa Public Television also carries the IRIS reading service for the blind and visually impaired statewide. There is no other mechanism in existence that can duplicate the reach of the nine-station over-the-air television network for reaching these people.

#### Bandwidth Utilization

Iowa Public Television currently broadcasts its primary programming stream in high definition (running between 10 and 16 mbps, 11 mbps average), its second programming service in standard definition (running between 2 and 6 mbps, 3 mbps average), its third programming service in standard definition (running between 1.5 and 6 mbps, 3 mbps average) and ancillary data services (using 103 kbps) including the IRIS radio reading service and certain other data distribution for the PBS's National Datacast, Inc.. All of these streams are available twenty four hours a day. Because of this commitment to serving viewers, sharing capacity with other stations would require that we reduce or eliminate services to viewers and would not be in the interest of the public that we are committed to serve.

### Over the Air Viewership

The Iowa Public Television Network serves the entire state of Iowa as well as portions of Illinois, Wisconsin, Minnesota, South Dakota, Nebraska and Missouri. In the total service area 220,410 households rely on over the air reception. In the Des Moines area, 15.3% of the households are over-the-air only. In the entire service area, 12.3% of the households are over-the-air only. Based on data collected from our educational outreach for the digital conversion we know that a significant number of homes that have subscription based services also utilize over the air reception for some televisions in their homes. Our best estimate is that this increases the number of households utilizing our over the air service to 23% of the households in the State.

In many of these “hybrid” homes the set that utilizes the over the air service is used to provide our children's services to the youngest viewers. In addition, the majority of the cable and satellite services only supply our primary service feed and do not carry the additional program streams and ancillary data services that are incorporated in our broadcasts. Viewers forced to move to a subscription based service not only would have to pay for services that are currently available for free but would actually receive fewer services.

### Viewer Characteristics

Data indicates that approximately 58% of our audience is age 50 or older. As part of our viewer education program for the digital conversion Iowa Public Television conducted over 100 in-person meetings statewide to explain digital reception to viewers. Of the thousands of people that attended these sessions, more than half were over 50 and majority were at retirement age or greater.

Viewer education and service is still a significant commitment for Iowa Public Television and we assist several hundred viewers a month with questions regarding over the air reception of digital services. Viewers contacting us for help with reception issues often mention that over the air reception is their only means of receiving television. Many mention being on fixed incomes and not being able to pay for cable or satellite service and even those that can pay mention that there is nothing on the subscription based services that they want to pay for. They find our free over-the air-service service to be very valuable.

Many of the over the air viewers may not have cable access due to the low population density in many rural areas in the State of Iowa. In some of areas where Iowa borders other states, the satellite services are either not offering local to local carriage or are not carrying an Iowa Public Television's station as the local station.

#### Subscription Providers Rely Over the Air Reception

It is not just the viewing public that directly relies on over the air reception. Our best data indicates that Iowa Public Television's service is carried on 283 different cable systems in Iowa and the surrounding states. At this time only one of those systems (Mediacom) takes a direct feed from our studios. All of the others rely on over-the-air service from one of our transmitters. Any disruption to the over-the-air service thus would massively impact subscription based services. Without a detailed analysis of all of the systems including their subscriber data it is impossible to develop a firm estimate of the total population adversely affected. But based upon subscriber data from the cable service that is directly fed by IPTV, a safe approximation would be that **at least one-half of the homes that receive Iowa Public Television's service via cable are dependent**

**on an over the air signal and would be disenfranchised if the FCC ends over-the-air broadcasting.**

#### Alternate Distribution to Subscription Service Providers

Without doing a extensive engineering analysis it is impossible to estimate the costs associated with getting the Iowa Public Television Network service to cable systems in the absence of over-the-air broadcasts, but a safe estimate would be that those costs would exceed the costs that Iowa Public Television spent on converting its transmission system to digital. Satellite could be used for distribution and it is estimated that the annual costs for a full time satellite feed would be approximately \$1.4M per year plus the costs of satellite antenna and receivers at all of the cable systems. Iowa Public Television currently distributes its signal to eight of its nine transmitters via the state owned fiber optic network at a cost of nearly \$1,000,000.00 per year. The costs of adding an additional 200+ sites to this fiber network would be prohibitive based on cost within the state and by state code for servicing cable systems outside the state.

#### Current Distribution Investment

As of September 30, 2009, Iowa Public Television has spent or encumbered \$48,500,000.00 for the conversion of our facilities statewide to digital television. Of that investment, \$48,260,000 came from state appropriations, U.S. Dept of Commerce grants, and Corporation for Public Broadcasting grants. If over the air broadcasting were to end, \$33,580,000 of the investment spent at our transmitter and translator sites across the state would be wasted.

Another cost that would have to be covered would be associated with tower and land leases. Iowa Public Television has approximately \$135,000 in annual commitments for tower and land leases covering two years to 20 years. All of the land leases contain



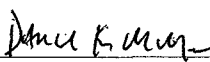
requirements that at the time the lease is terminated, the land must be returned to its original state. This would mean that we would need to take down our towers, antennas, and transmission lines at each of our sites. This would cost approximately \$12,000,000.00. We also have leases where we rent tower space to others and those commitments also cover two to 20 years so in those cases Iowa Public Television would be required to maintain sites for which we have no direct use.

Conclusion

Based on the foregoing reasons, we urge the Commission to find that our use of our television broadcast channels is efficient and productive, and abundantly serves the public interest. Our over-the-air transmission capabilities must be protected in any effort that the Commission might undertake to allocate more spectrum for wireless broadband systems.

Respectfully submitted,

IOWA PUBLIC BROADCASTING BOARD

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